## Extension Service

Agronomic Crops			
Stage of Growth	Plant Part to Sample	Number of Plants to Sample	
Prior to or at 1/10 bloom stage	<b>Alfalfa -</b> Mature leaf blades taken from the top 4 to 6 inches of the plant	40 - 50	
Prior to bloom	Clover and Other Legumes - Mature leaf blades taken about 1/2 of the way down from the top of the plant	40 - 50	
1) Seedling stage (less than 12") or 2) Prior to tasseling or 3) From tasseling to silking  Sampling after silking occurs is not	Corn - All the above-the-ground portion	15 - 20	
recommended.  Prior to or at first bloom or when first ??	<b>Cotton</b> - Youngest fully mature leaves on main stem squares appear	30 - 40	
Prior to seed head emergence or at the optimum stage for best quality forage.	Hay, Pasture or Forage Grasses - Top 6 inches of plant	40 - 50	
Prior to or at bloom stage	<b>Peanuts</b> - Mature leaves from both the main stem and either cotyledon lateral branch	40 - 50	
Prior to or at heading	<b>Sorghum - Milo</b> - Second leaf from top of plant	15 - 25	
1) Seedling stage (less than 12") or	Soybeans or Other Beans - All the above ground portion	20 - 30	
2) Prior to during initial flowering	Two or three fully developed leaves at the top of the plant	20 -30	
Sampling after pods begin to set not recommended.			
Before bloom	Tobacco - Uppermost fully developed leaf	8 - 12	
During normal growing season; at least two days re-growth	<b>Turf</b> - Mature leaves from both the main stem and either cotyledon lateral branch	1/2 pint material	
1) Tillering to just prior to heading or 2) Just prior to heading	<b>Wheat</b> - All above-ground portion  Flag leaf	30 - 40 40 - 50	
Sampling after heading not recommended.			

During normal growing season; at least two days	<b>Turf</b> - Mature leaves from both the main stem and either cotyledon lateral branch	1/2 pint material
re-growth	otem and elemen cotyledom lateral branen	
During normal growing season; at least two days re-growth	<b>Turf</b> - Mature leaves from both the main stem and either cotyledon lateral branch	1/2 pint material
	Vegetable Crops	
Stage of Growth	Plant Part to Sample	Number of Plants to Sample
Mid growth, 18-36" up	Asparagus - Mature fern from	10 - 20
1) Seedling stage (less than 12")	Beans - All the above-ground portion	20 - 30
flowering	Two or three fully developed leaves at the top of the plant	20 - 30
1) Prior to heading	<b>Head Crops</b> (Cabbage, etc.)- Uppermost fully developed leaf	10 - 20
2) Head 1/2 grown	Young wrapper leaf; 2 leaves per plant	10 - 20
Early stages of growth prior to full fruit set	<b>Melons</b> (Water, Cucumber, Muskmelon) - Mature leaves near the growing tip of the plant.	20 - 30
Prior to or during initial flowering	<b>Peas</b> - Leaves from the third from the top node down from the plant.	30 - 60
Early flowering to tubers 1/2 grown	Potatoes, Irish - Upper most mature	20 - 30
Mid growth	Potatoes, Sweet - Most recently mature leaves	20 - 30
Prior to root or bulb enlargement	<b>Root Crops</b> (Carrots, Onions, Beets, etc.)- Center mature leaves	20 - 30
1) Prior to tasseling	Sweet Corn - The entire fully mature leaf below the whorl	20 - 30
2) At tasseling	The entire leaf at the ear node	
Prior to or during early bloom stage	<b>Tomato</b> (Field) - Third or fourth leaf from growing tip	20 - 25
Prior to or during fruit set	<b>Tomato</b> (Greenhouse) - 1) Young plants: leaves adjacent to 2nd and 3rd clusters	20 - 25
	2) Older plants: leaves from 4th to 6th clusters	
Fruit and Nuts		
Stage of Growth	Plant Part to Sample	Number of Plants to Sample
8 - 10 weeks after fall bloom	<b>Apple</b> - Healthy mid-terminal leaves of current season's growth, taking 4 to 8 leaves per tree	50 - 100
Mid Season	Apricot, Almond, Cherry, Pear, Prune - Healthy mid-terminal leaves of current	50 - 100

	year's growth or from spurs	
First two weeks after harvest	<b>Blueberry, Rabbiteye</b> - Mature leaves from mid-portion of current season's growth	25 - 40
End of bloom period	<b>Grapes</b> - Petioles from leaves adjacent to fruit clusters	60 - 100
Mid to late summer but prior to final swelling of fruit	<b>Grapes, Muscadine</b> - Most recent mature leaves adjacent to fruit clusters	25 - 30
12 to 14 weeks after bloom	<b>Peach</b> - Mature leaves from mid-portion or near base of current season's terminal growth, taking 4 to 8 leaves per tree.	50 - 100
56 to 84 days after catkin fall; July 7 to August 7	<b>Pecan</b> - Middle pair of leaflets from mid- portion of terminal growth	100
	Specific sampling instructions for Pecans listed below.	
Mid season	Raspberry - Youngest mature leaves on laterals or "primo" canes	20 - 40
6 to 8 weeks after bloom	<b>Walnut</b> - Middle pair of leaflets from mature shoots	30 - 35
	Ornamentals and Flowers	
Stage of Growth	Plant Part to Sample	Number of Plants to Sample
1) Unpinched plants	<b>Carnations</b> - 4th or 5th leaf pairs from base of plant	20 - 30
2) Pinched plants	5th and 6th leaf pairs from top of primary laterals	20 - 30
Prior to or at flowering	<b>Chrysanthemums</b> - Upper leaves on flowering stem	20 - 30
Current year's growth	Ornamental trees - Fully developed leaves	30 - 100
Current year's growth	Ornamental shrubs - Fully developed leaves	30 - 100
Prior to or at flowering	<b>Poinsettias</b> - Most recently mature fully expanded leaves	15 - 20
During flower production	Roses - Upper leaves on the flowering stem	20 - 30

## **Pecan Sampling**

Results of a leaf analysis can be no better than the sampling procedures used. To help ensure obtaining reliable analytical retults and fertilizer recommendations, follw these sampling instructions.

- 1. Sample trees between July 7th and August 7th. (Sampling can be extended into mid-August without significantly affecting the results.
- 2. Take one sample every 10 to 15 acres. If more than one soil type is present in the sampling area and if growth and production varies appreciably in these areas, take one sample from each soil type. Take samples at random using a zig-zag sampling pattern across the grove.
- 3. Collect 100 middle pair of leaflets from the middle leaf of this year's growth. Use terminal shoots exposed to the sun. Avoid twigs from the interior or the tree. Collect leaflets from all sides of the tree. Avoid leaflets damaged by insects and diseases.
- 4. Sample trees of different varieties and different ages separately.
- 5. Abnormal trees or trees not representative of the area should be sampled and sent separately. A complete and accurate description of abnormalities should accompany such samples.
- 6. Immediately upon collection, wipe leaves (entire surface, both top and bottom) with a damp cellulose sponge or cheese cloth to remove dust and spray residue. Do not allow the leaves to come into contact with rubber or galvanized containers. Partially air dry and place in the large envelope of the mailing kit.
- 7. Complete the questionnaire contained in each mailing kit. Place the completed questionnaire in the smaller envelope together with a check for appropriate fees payable to "UGA Soil, Plant and Water Laboratory."
- 8. If recent soil test data are not available, collect a soil sample and have it sent to the Soil, Plant and Water Laboratory. Soil sample bags are available at the county agent's office. Reference to the associated pecan leaf sample can be made on the soil sample bag.